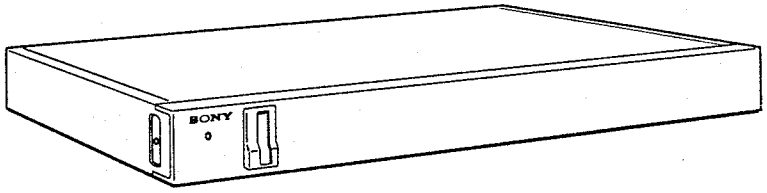
# YS-W230/W230P

# SERVICE MANUAL




## SPECIFICATIONS

| | |
|---|---|
| Power supply | YS-W230; 120V AC, 60 Hz<br>YS-W230P; 220 to 240V AC, 50/60 Hz |
| Power consumption | 65W |
| Input connectors | CAMERA INPUT 1 to 4 (BNC) 4<br>Connect only to Sony SSC-C350/C350P, M350/M350CE, M370/M370CE, AVC-D7/D7CE or DXC-107/107P cameras<br>SYNC IN (BNC) 1<br>Composite sync signal: 4 Vp-p, 75 ohms terminated<br>VS (vide/sync): 1 Vp-p, 75 ohms terminated<br>VBS (video/burst/sync): 1 Vp-p, 75 ohms terminated |
| Output connectors | VIDEO OUTPUT 1 to 4 (BNC) 8<br>Composite video signal: 1 Vp-p, 75 ohms terminated<br>SYNC OUT (BND) 1<br>For loop-through output of the signal input to SYNC IN |
| Operating temperature | –10 °C to +40 °C (40 °F to 113 °F) |
| Dimensions | 424×57×352 mm (w/h/d)<br>(16 3/4 × 2 1/4 × 13 7/8 inches) |
| Weight | YS-W230; About 4.0 kg (8 lb 13 oz)<br>YS-W230P; About 4.1 kg (9 lb) |
| Supplied accessories | Rack mounting screws (EIA standard) (1 set)<br>Operation manual |

Design and specifications are subject to change without notice.

## CAMERA ADAPTOR

SONY®

# SAFETY CHECK-OUT

**(US model only)**

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

## LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

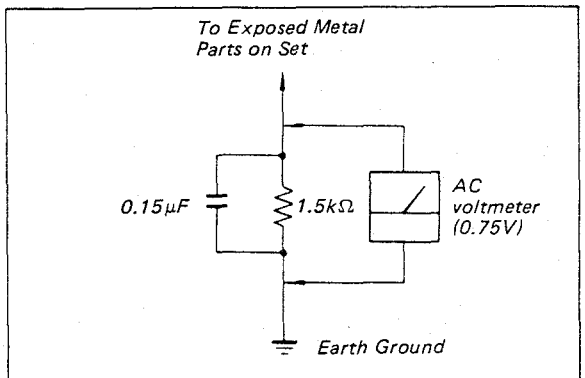



*Fig. A. Using an AC voltmeter to check AC leakage.*

## SAFETY RELATED COMPONENT WARNING

Components identified by shading and ⚠ marked on the schematic diagrams and parts list are critical to safe operation. Replace these components with SONY parts whose part numbers appear as shown in this manual or in supplements published by SONY.

## FEATURES

The YS-W230/W230P camera adaptor is designed for use with Sony SSC series video cameras as well as the AVC-D7/D7CE and DXC-107/107P video cameras. The YS-W230/W230P is used to transmit the video signal output by the cameras to monitors. The unit also provides power and an internal or external sync signal to the cameras.
The YS-W230/W230P has four camera input connectors and eight video output connectors. You can connect up to four cameras and eight monitors to the unit.

- A single 75-ohm coaxial cable (not supplied) between the adaptor and the camera carries the video output signal, power, and sync signal.
- The unit has a built-in cable compensation circuit. This can switch the video signal compensation level to any of three levels, according to the length of the cable.
- The synchronization selector switch allows the use of an external sync signal.
- The unit is provided with input/output sync connectors. Hence, the YS-W230/W230P can supply a sync signal to other YS-W230s/W230Ps. Thus, you can connect two or more YS-W230s/W230Ps together, up to a maximum of 50 units.
- All cameras connected to the YS-W230/W230P are automatically synchronized with each other.
- Two video output connectors for each camera enable system flexibility.

## TABLE OF CONTENTS


| Section | Title | Page |
|---|---|---|
| **1.** | **GENERAL** | |
| 1-1. | Note on Use | 3 |
| 1-2. | Location and Function of Parts | 4 |
| 1-3. | Connections | 6 |
| 1-4. | Operation | 10 |
| **2.** | **DISASSEMBLY** | |
| 2-1. | Removal of Upper Lid and C.C.U. Panel Assembly | 11 |
| 2-2. | Removal of CN-614 Board | 12 |
| 2-3. | Removal of Power Block Assembly | 12 |
| **3.** | **THEORY OF OPERATION** | 13 |
| **4.** | **DIAGRAMS** | |
| 4-1. | Block Diagram | 14 |
| 4-2. | Circuit Boards Location | 17 |
| 4-3. | Printed Wiring Boards and Schematic Diagram | 17 |
| 4-4. | Semiconductors | 26 |
| **5.** | **REPAIR PARTS** | |
| 5-1. | Exploded Views | 27 |
| 5-2. | Electrical Parts List | 29 |

# SECTION 1
# GENERAL

## 1-1. NOTE ON USE

### Safety

**Power supply**
- This unit requires 120V AC (YS-W230)/220 to 240V AC (YS-W230P) power supply.
- Be careful not to damage the power cable by placing or dropping heavy objects on it; it is dangerous to use the unit with a damaged cable.
- If you are not using the unit for a long time, disconnect the power cable.
- Unplug the power cable holding the plug, not the cable itself.

**Do not disassemble the unit**
Do not remove the cover. There is a danger of electric shock from the internal parts.

**Do not get foreign bodies inside the unit**
Be careful not to spill water or other liquids on the unit, or to get combustible or metallic material inside the cabinet. If used with foreign matter inside, the unit is liable to fail, or be a cause of fire or electric shock.

**Do not obstruct the ventilation holes**
The ventilation holes are provided to prevent the unit from overheating. Be careful not to obstruct them with other units or by wrapping the unit in cloth etc. If you use the unit in a rack, ensure that there is a gap above the unit.

### Operation, Storage and Care

**Operating and storage locations**
Avoid operating or storing the unit in the following locations.
- Extremely hot or cold places (operating temperature −10°C to +45°C (14°F to 113°F).
- Damp or badly ventilated places
- Locations exposed to direct sunlight for long periods, or close to central heating units.
- Dusty places
- Locations subject to strong vibration

**Do not subject the unit to strong impacts**
Be careful not to drop the unit, or subject it to other shocks, which could cause it to fail.

**Install the unit in a horizontal position**
The unit is designed for operation in a horizontal position. Never operate the unit in a vertical position.

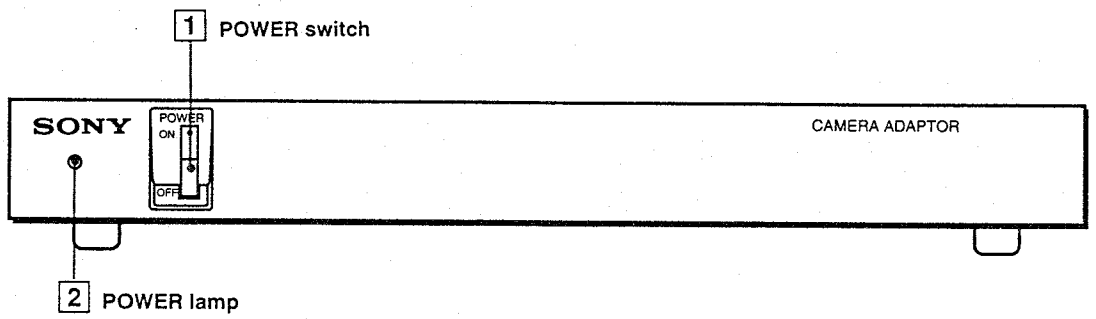
**Rack mounting**
The unit can be mounted in an EIA standard 19-inch rack by using the rack mounting screws (supplied).

**Cleaning**
Clean the exterior of the unit with a dry soft cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, and wipe dry. Avoid the use of volatile solvents such as thinners, alcohol, benzene, and insecticides. They may damage the surface finish, or destroy the indication markings.

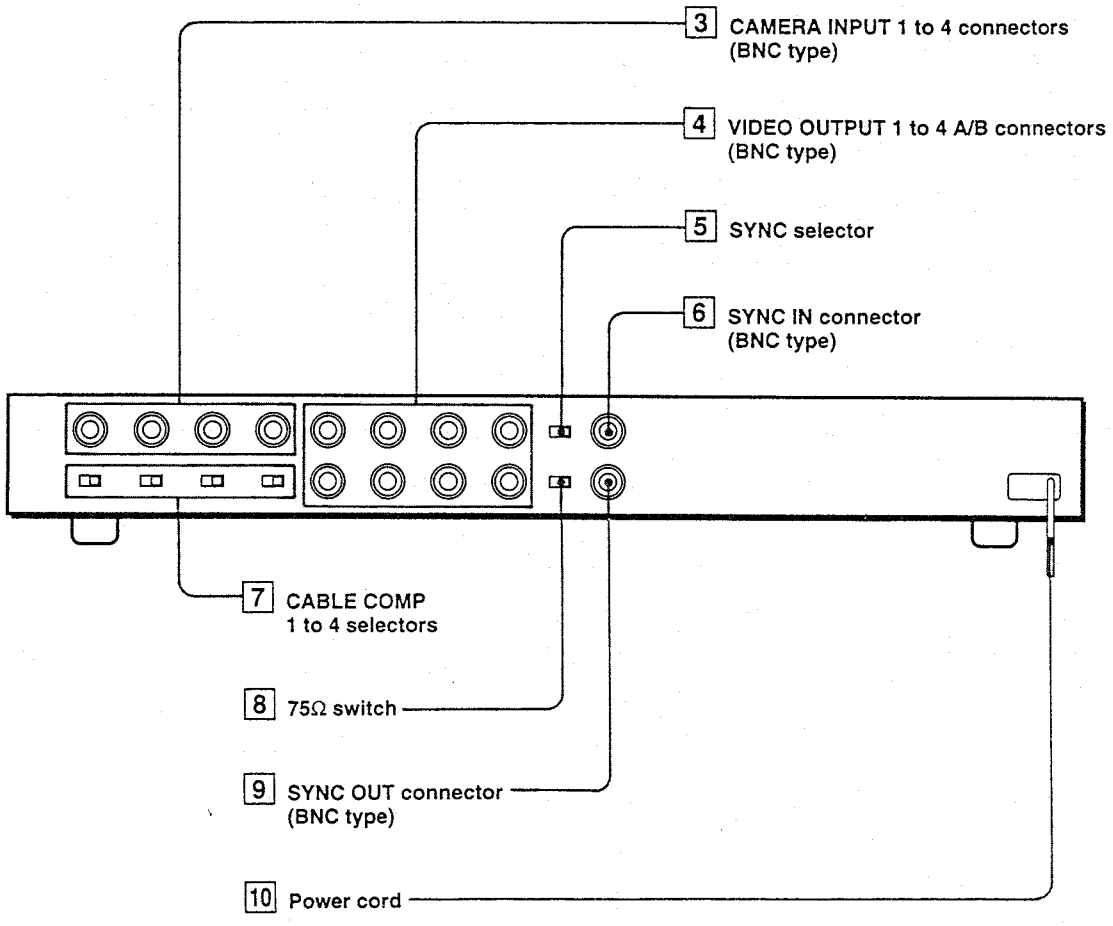
**Shipping**
If the unit has to be reshipped, repack it for maximum protection in the original packaging or similar.
Save the original carton and associated packing material. They will be useful should you have to transport or ship the unit.

## 1-2. LOCATION AND FUNCTION OF PARTS

### Front Panel




### Rear Panel



**1 POWER switch**
Turns the power on and off. When you press the ON side of the switch, the unit supplies the power to all connected cameras.

**Notes**
- Connect all cameras before turning the power on. A camera connected after the power is turned on will not operate.
- Never turn the power on again immediately after turning the power off. Wait three to four seconds before turning the power on again.

**2 POWER lamp**
Lights in green when the power is turned on.

**3 CAMERA INPUT connectors 1 to 4 (BNC type)**
Connect to the camera DC IN/VIDEO OUT connector.

**Note**
When connecting cameras, be sure to connect a camera to connector CAMERA INPUT 1. If not, the cameras will not be locked to the synchronizing camera output video signal.

**4 VIDEO OUTPUT connectors 1 to 4 A/B (BNC type)**
Connect to the monitor video input connector. The video signal corresponding to each CAMERA INPUT connector is output. The same signal is output from connectors A and B.

**5 SYNC selector**
Used to select internal or external synchronization.
**INT:** Cameras 2 to 4 are locked to the video signal output by camera 1, connected to connector CAMERA INPUT 1.
**EXT:** Cameras 1 to 4 are locked to the external sync signal input to the SYNC IN connector.

**Note**
When using the YS-W230/W230P, the internal sync signal is the video signal output by the camera connected to connector CAMERA INPUT 1.

**6 SYNC IN connector (BNC type)**
Inputs the external sync signal (or synchronizing video signal) for external synchronization.

**7 CABLE COMP selectors 1 to 4**
Selects the compensation for signal loss in the camera connecting cable. Set the switch according to the cable type and length. For details, see "Connection—Setting the CABLE COMP selectors".

**8 75Ω switch**
Effective only when the SYNC selector is set to EXT.
**ON:** Set to this position when using only the SYNC IN connector. The SYNC IN connector is 75-ohm terminated.
**OFF:** Set to this position when using both the SYNC IN and SYNC OUT connectors.

**Note**
When using neither the SYNC IN connector nor SYNC OUT connector, set this switch to ON.

**9 SYNC OUT connector (BNC type)**
Outputs the sync signal input to the SYNC IN connector as it is.

**Note**
No sync signal is output from the SYNC OUT connector when no signal source is connected to the SYNC IN connector.

**10 Power cord**
Connect to an AC outlet.

## 1-3. CONNECTIONS

This section explains the making of connections to the YS-W230/W230P. This section consists of the following three parts.

- Using one YS-W230/W230P
- Using Two or More YS-W230s/W230Ps
- Connecting to a Sequential Switcher

### Cameras you can connect to the YS-W230/W230P

You can connect the cameras listed in the following table.

| | |
|---|---|
| Sony SSC series video camera | SSC-C350/C350P<br>SSC-M350/M350CE<br>SSC-M370/M370CE |
| Sony video camera | AVC-D7/D7CE |
| Sony video camera | DXC-107/107P |

**Notes**

- The unit operates only when connected to Sony video cameras listed above.
- When connecting a camera, refer also to the operation manual for that video camera.

### Setting the CABLE COMP selector

Setting the CABLE COMP selector compensates for signal loss in the camera connecting cable.
Set the switch according to the cable type and length, as shown in the following table.

**When connecting to an SSC series video camera**

| Switch setting / Cable type | 1 | 2 | 3 |
|---|---|---|---|
| RG-59B/U (3C-2V) | 100m (328ft) max. | 200m (656ft) max. | 300m (984ft) max. |
| RG-6A/U (5C-2V) | 160m (524ft) max. | 330m (1082ft) max. | 500m (1640ft) max. |
| RG-11A/U (7C-2V) | 200m (656ft) max. | 400m (1312ft) max. | 600m (1968ft) max. |

**When connecting to an AVC-D7/D7CE or DXC-107/107P video camera**

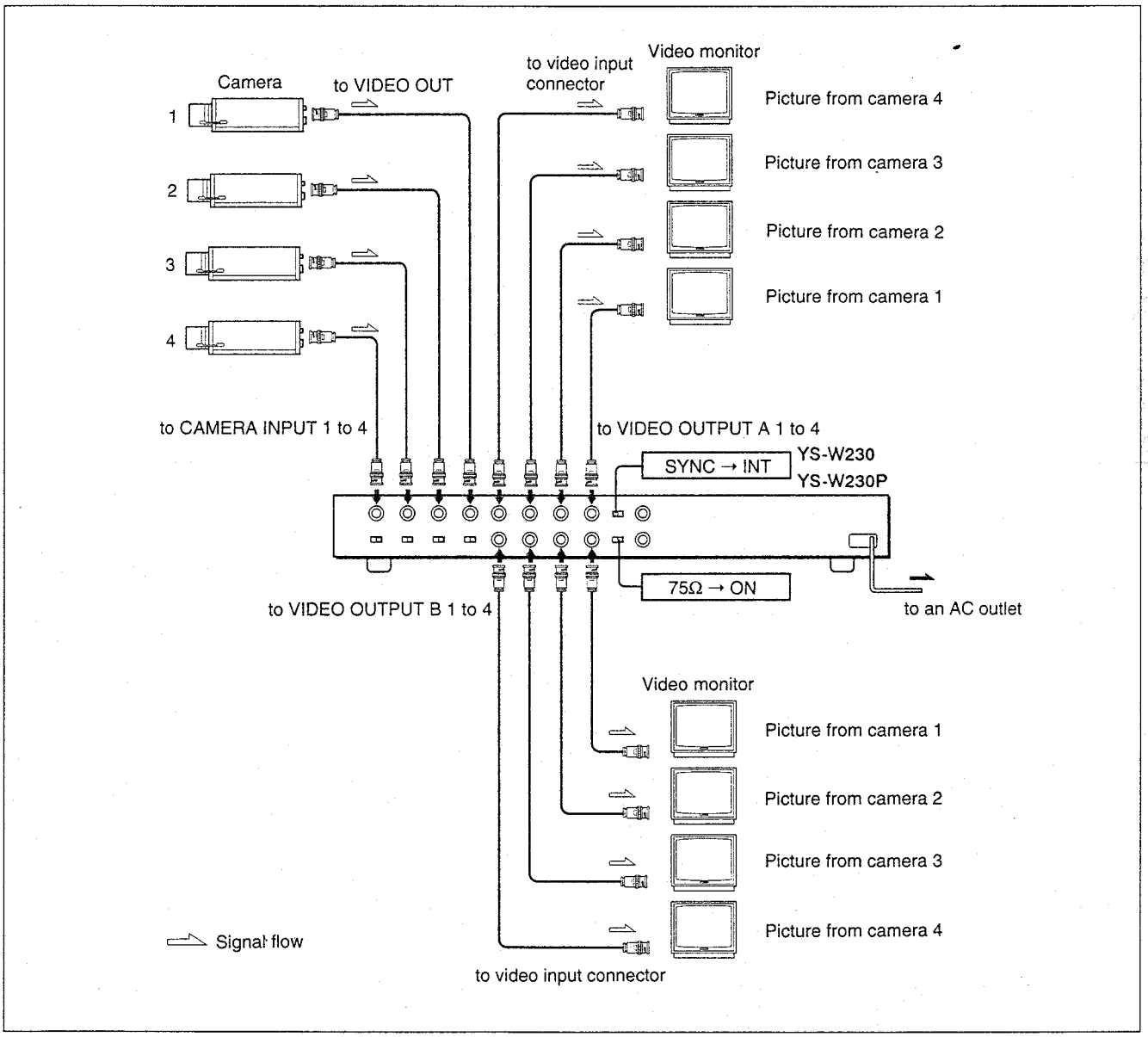
| Switch setting / Cable type | 1 | 2 | 3 |
|---|---|---|---|
| RG-59B/U (3C-2V) | 100m (328ft) max. | | |
| RG-6A/U (5C-2V) | 160m (524ft) max. | 300m (984ft) max. | |

**Notes on connections**

- Set all power switches to OFF before connecting any cameras. If a camera is connected to the unit with the power already turned on, the unit will not supply power to that camera.
- The cable connecting the unit to the video camera carries the power supply and sync signal in addition to the camera output video signal. Therefore, you can not insert a booster or similar device into the cable.

# Using One YS-W230/W230P

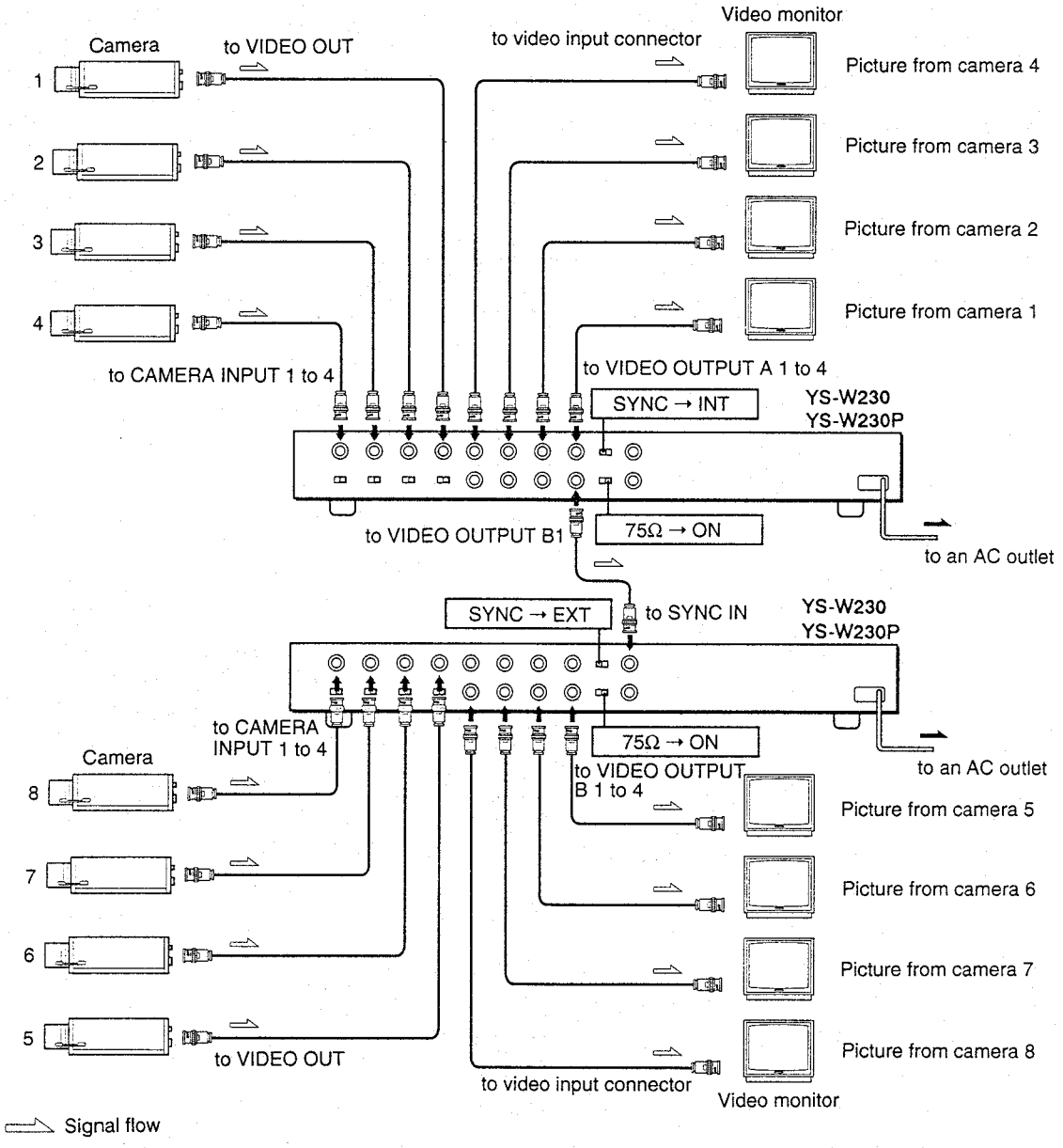
Using one YS-W230/W230P, you can set up four independent camera systems consisting of four cameras, with two monitors for each camera.



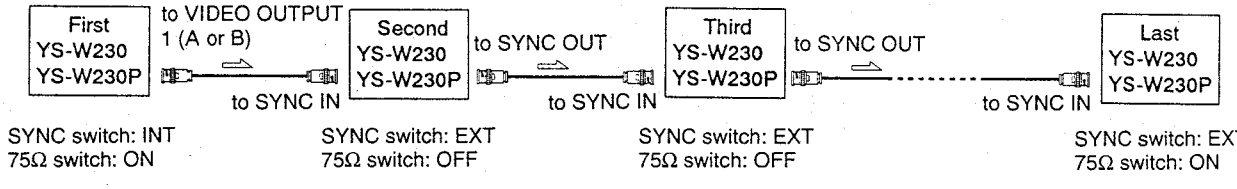
# Using Two or More YS-W230s/W230Ps

You can connect two to fifty YS-W230s/W230Ps together. Since the unit provides the SYNC IN and SYNC OUT connectors, all connected cameras can be synchronized with each other.

**Example: When using two SY-W230s/W230Ps**

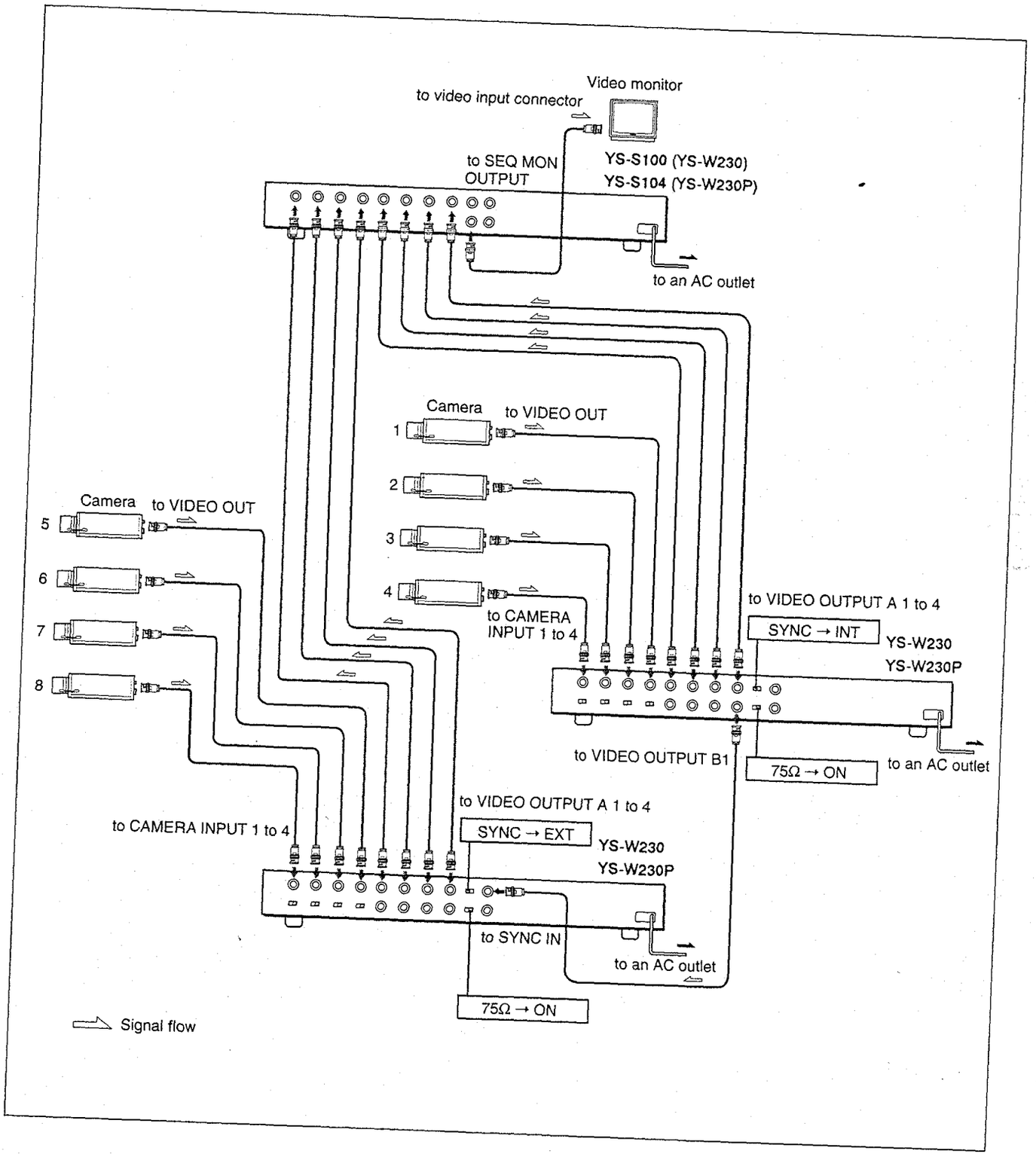



**Connection of sync signals and setting of SYNC and 75Ω switches for three or more YS-W230s/W230Ps**

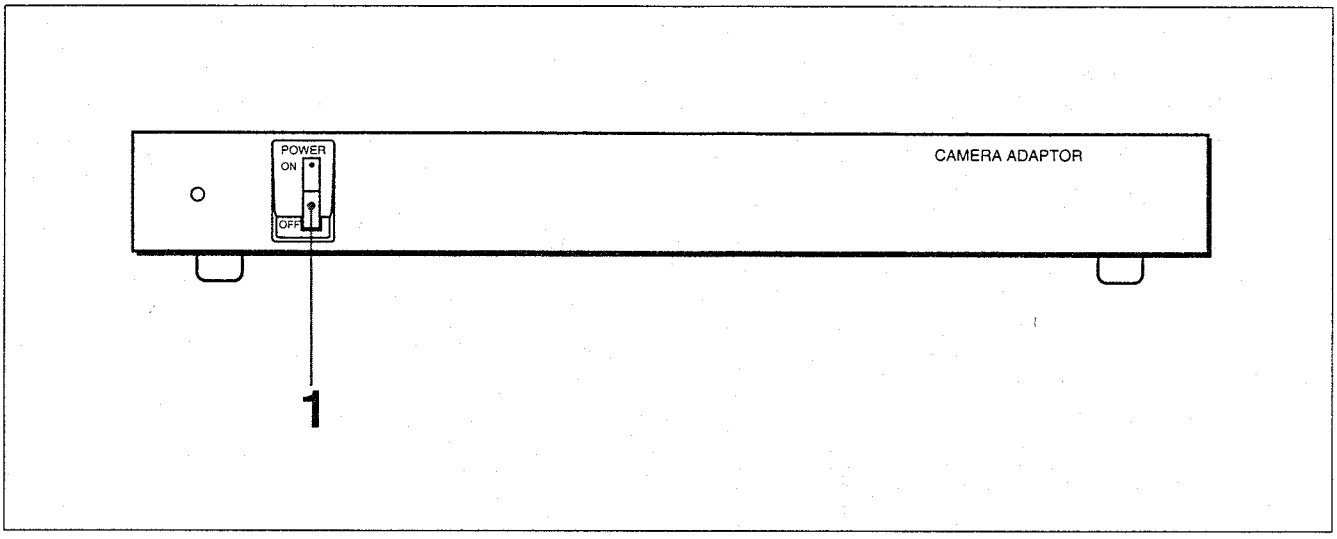


# Connecting to a Sequential Switcher

By connecting the units to the YS-S100 (YS-W230)/ YS-S104 (YS-W230P) sequential switcher (not supplied), you can sequentially view pictures from the cameras connected to the YS-W230s/W230Ps on a single video monitor connected to the sequential switcher.



## 1-4. OPERATION




**1** **Set the POWER switch to ON.**
The POWER lamp lights. The unit outputs power and sync signals to the cameras, and passes video signals from the cameras to the monitors.

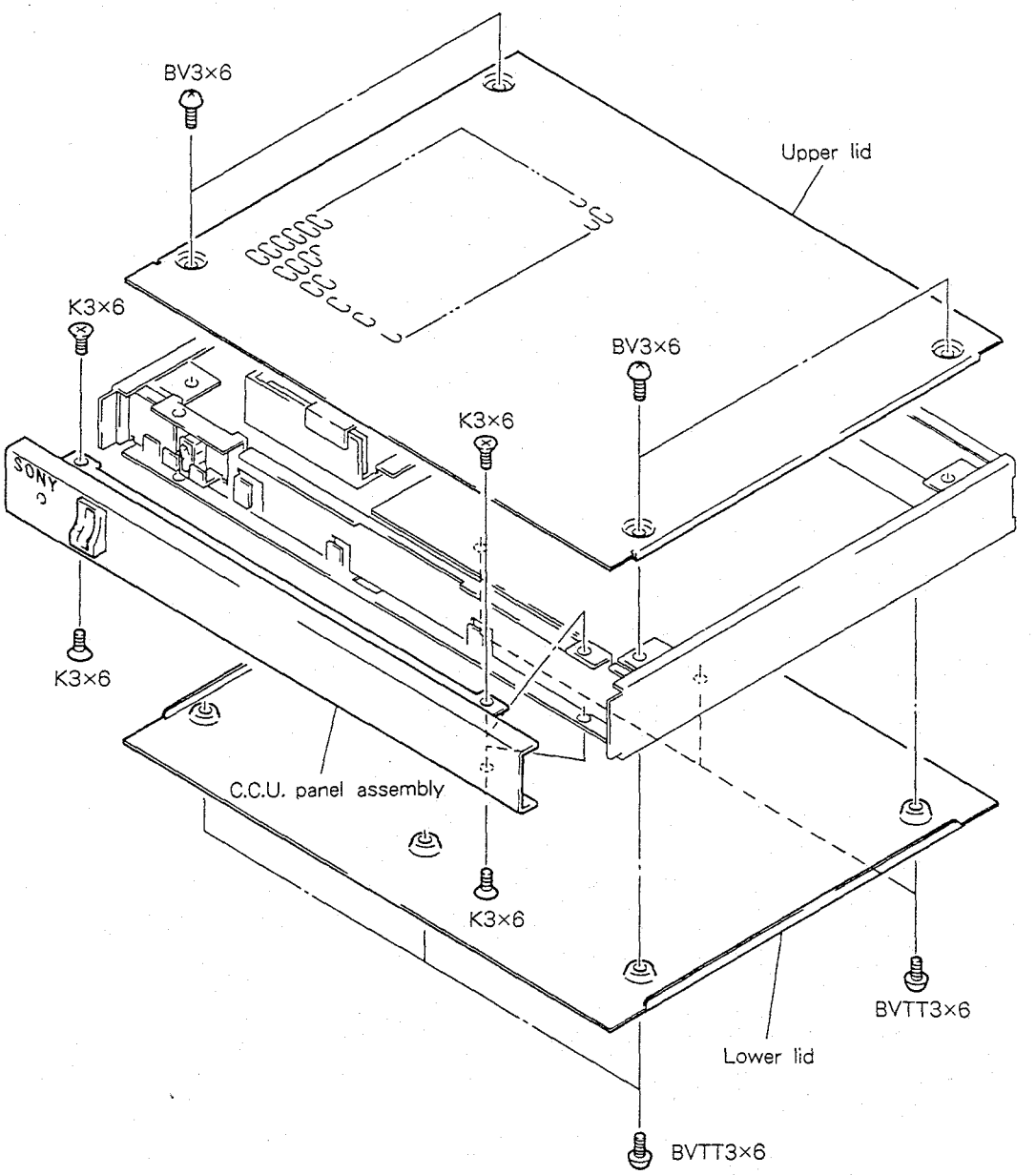
**Note**

SSC series video cameras are provided with a power switch. When using SSC series video cameras with the YS-W230/W230P, the position of the camera's power switch is irrelevant (the power switch does not work).

# SECTION 2
# DISASSEMBLY

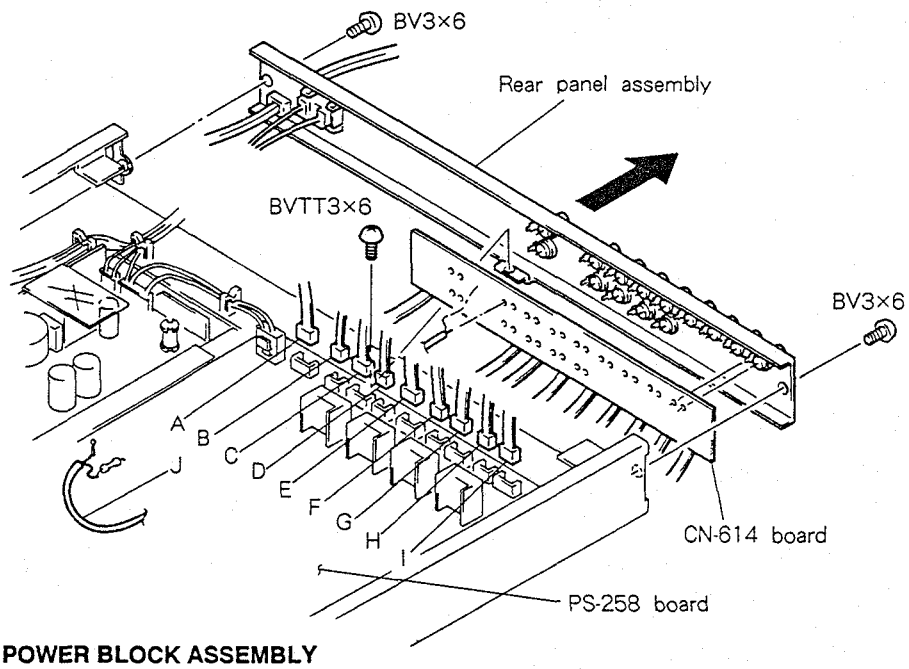
## 2-1. REMOVAL OF UPPER LID AND C.C.U. PANEL ASSEMBLY

① Remove four screws (BV3×6) and remove the upper lid.
② Remove six screws (BVTT3×6) and remove the lower lid.
③ Remove four screws (K3×6) and remove the C.C.U. panel assembly.



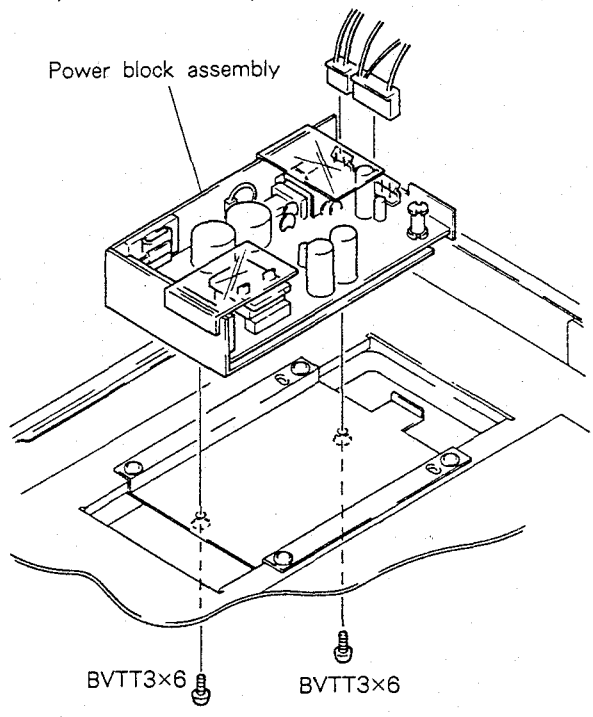
## 2-2. REMOVAL OF CN-614 BOARD

① Disconnect ten connectors (A to J) from the PS-258 board.
② Remove two screws (BV3×6) and one screw (BVTT3×6), and take out the rear panel assembly in the arrow direction.
③ Remove the soldering of the BNC connector and remove the CN-614 board.




## 2-3. REMOVAL OF POWER BLOCK ASSEMBLY

① Disconnect two connectors from the power block assembly.
② Remove two screws (BVTT3×6) and take out the power block assembly.



# SECTION 3
# THEORY OF OPERATION

YS-W230/W230P is a camera adapter which can connect four cameras, and contains four-channel circuit.
Each circuit is the same, so only the CAMERA INPUT 1 circuit is explained below

**[POWER SUPPLY BLOCK]**
DC 30.5V is supplied from a switching regulator. High impedance output voltage stabilized at Q116 POWER DRIVE transistor is output to the CAMERA INPUT 1 together with an external synchronizing signal. The voltage stabilized to 12V by the DC-to-DC converter is output to each circuit as a power.

**[VIDEO SIGNAL PROCESSING BLOCK]**
The video signal from CAMERA INPUT 1 is dc-cut by C102 capacitor, and is terminated by 75Ω resistor R101. Differential amplifier IC101 cancels an external synchronizing signal. The resultant video signal is clamped by the VIDEO CLAMP transistor Q101, amplified by the VIDEO AMP transistors Q105 and Q106, and is then output through the buffer to the VIDEO OUTPUT A (1) and VIDEO OUTPUT B (1) connectors.

**[INTERNAL SYNC SIGNAL PROCESSING BLOCK]**
COMPOSITE SYNC component is separated by the SYNC separator IC501 from the VIDEO OUT signal input from CAMERA 1. The resultant signal is output through the video amplifier IC201 and 75Ω resistor R201 to CAMERA INPUT 2 together with a power.

**[EXTERNAL SYNC SIGNAL PROCESSING BLOCK]**
COMPOSITE SYNC component is separated by the SYNC separator IC501 from the synchronizing signal (or video signal) input from SYNC IN connector. The resultant signal is output through the video amplifier IC101 and 75Ω resistor R101 to CAMERA INPUT 1 together with a power.

**[CABLE COMPENSATION CIRCUIT]**
It selects the gain and frequency response for VIDEO AMP transistors Q105 and Q106 according to the cable length of CAMERA 1. They are switched in three steps.

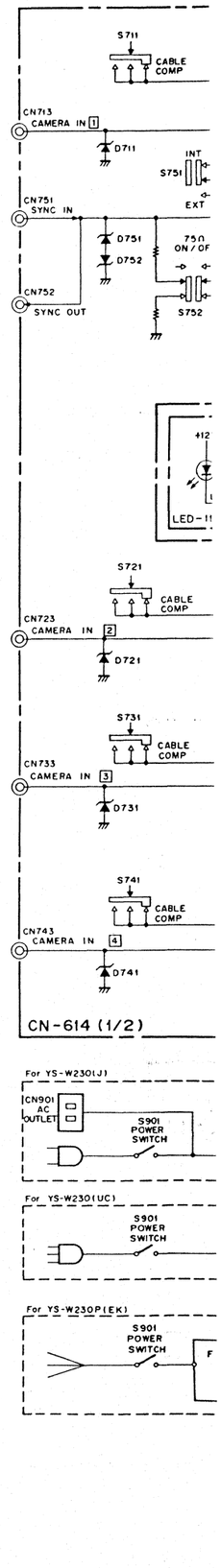
**[SYNC DETECTION PROTECTOR CIRCUIT]**
When no video signal (SYNC signal) is input to CAMERA INPUT 1, the POWER DRIVE transistor Q116 is cut off by the SYNC SW transistor Q115 and the CURRENT SW transistor Q119, and the current stops flowing. Consequently, as the LED DRIVE transistor Q502 is cut off, the LED becomes dim.

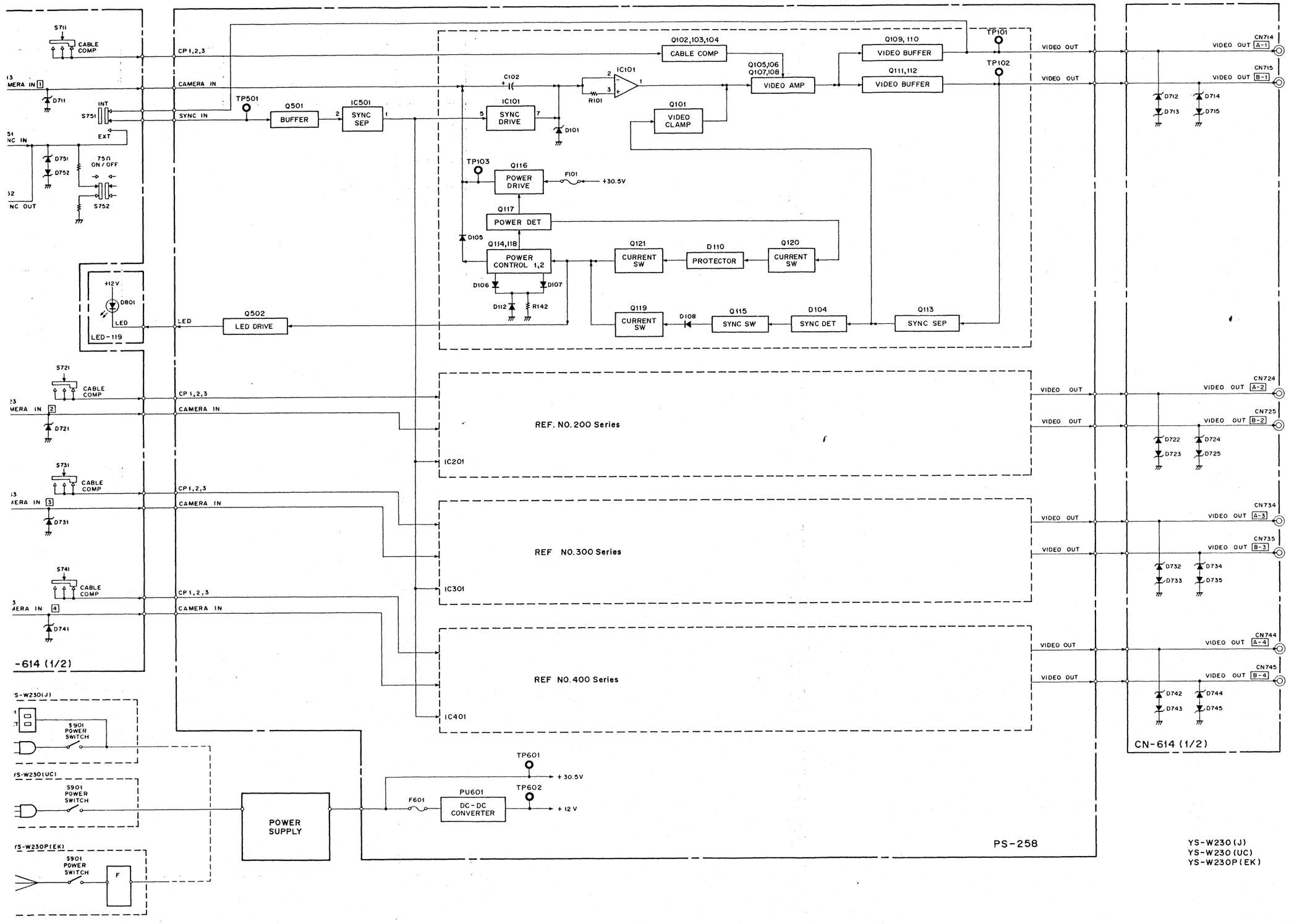
**[NO-LOAD DETECTION CIRCUIT]**
The CURRENT SW transistors Q120 and Q121 detect the load current at CAMERA INPUT 1.
When a no-load current is detected, the POWER DRIVE transistor is cut off and stops output. Then, the LED becomes dim.



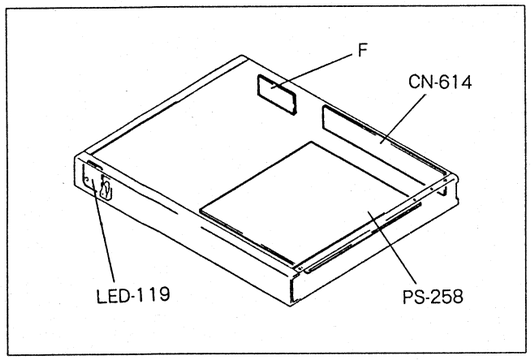
# SECTION 4
# DIAGRAMS

## 4-1. BLOCK DIAGRAM




S711
CABLE COMP
CP 1,2,3
CAMERA IN
SYNC IN
D711
INT
S751
EXT
D751
D752
75Ω ON / OFF
S752
TP501
Q501
BUFFER
IC501
SYNC SEP
C102
IC101
SYNC DRIVE
R101
D101
Q102,103,104
CABLE COMP
Q105,106
Q107,108
VIDEO AMP
Q109, 110
VIDEO BUFFER
Q111,112
VIDEO BUFFER
TP101
TP102
VIDEO OUT
Q101
VIDEO CLAMP
TP103
Q116
POWER DRIVE
F101
+30.5V
Q117
POWER DET
D105
Q114,118
POWER CONTROL 1,2
Q121
CURRENT SW
D110
PROTECTOR
Q120
CURRENT SW
D106
D107
D112
R142
Q119
CURRENT SW
D108
Q115
SYNC SW
D104
SYNC DET
Q113
SYNC SEP
+12V
D801
LED
LED-119
Q502
LED DRIVE
CN714
VIDEO OUT A-1
CN715
VIDEO OUT B-1
D712
D713
D714
D715
S721
CABLE COMP
D721
REF. NO. 200 Series
IC201
CN724
VIDEO OUT A-2
CN725
VIDEO OUT B-2
D722
D723
D724
D725
S731
CABLE COMP
D731
REF NO. 300 Series
IC301
CN734
VIDEO OUT A-3
CN735
VIDEO OUT B-3
D732
D733
D734
D735
S741
CABLE COMP
D741
REF NO. 400 Series
IC401
CN744
VIDEO OUT A-4
CN745
VIDEO OUT B-4
D742
D743
D744
D745
-614 (1/2)
CN-614 (1/2)
S901
POWER SWITCH
TP601
+30.5V
TP602
+12 V
PU601
DC-DC CONVERTER
F601
POWER SUPPLY
F
PS-258
YS-W230(J)
YS-W230(UC)
YS-W230P(EK)

## 4-2. CIRCUIT BOARDS LOCATION



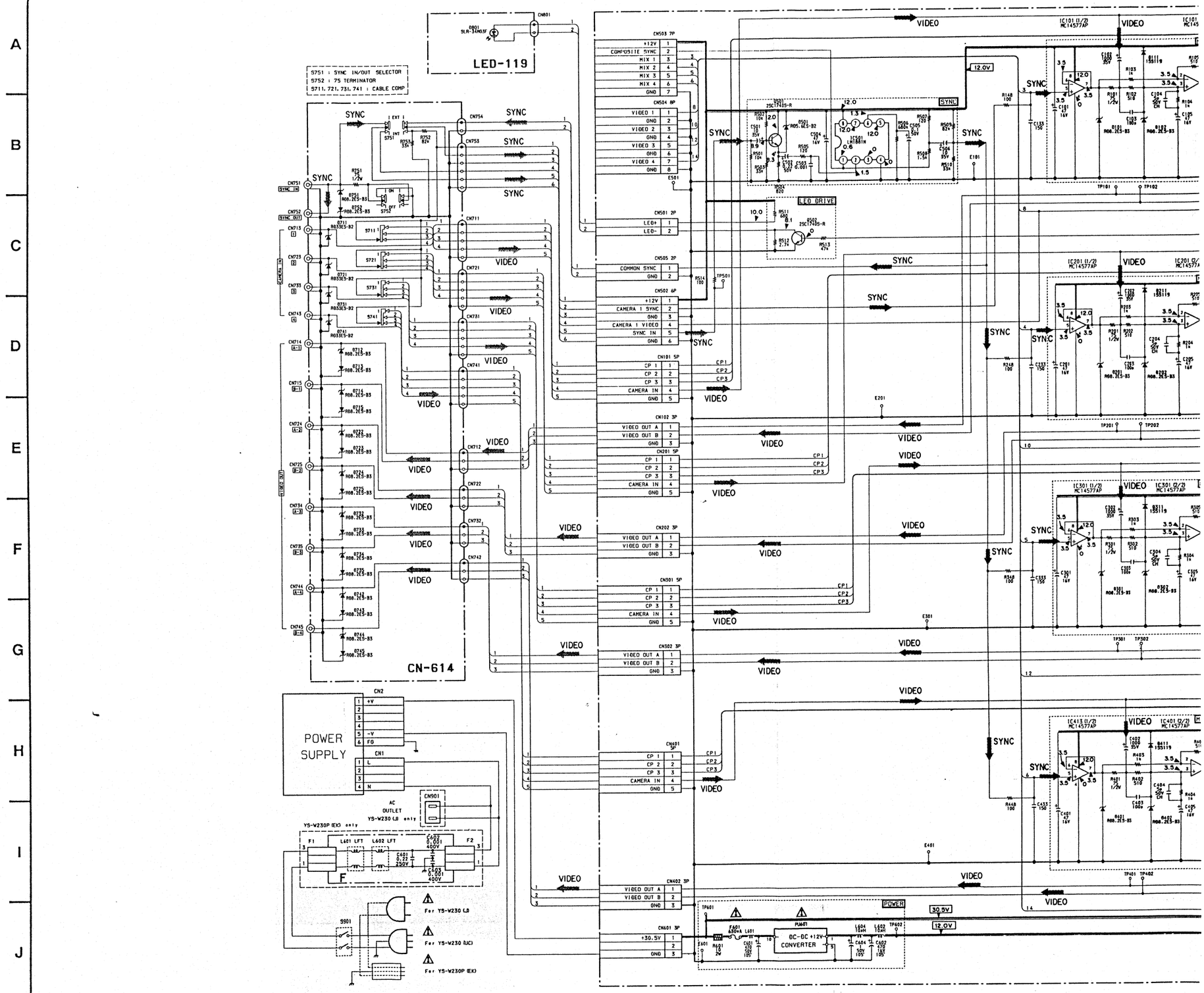

## 4-3. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAM

**Note:**

**Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.**

- All capacitors are in μF unless otherwise noted. pF: μμF. 50V or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W unless otherwise noted. kΩ : 1000 Ω , MΩ : 1000kΩ .
- [ ] : panel designation.
- [ ] : adjustment for repair.
- Voltages are dc between ground and measurement points.
- Readings are taken with a connect the camera for CAMERA IN (BNC connector)
- Readings are taken with a digital multimeter (DC10MΩ )
- Voltage variations may be noted due to normal production tolerances.
- [V] : B+bus.
- ➡ : Signal path.





12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27




PS-258

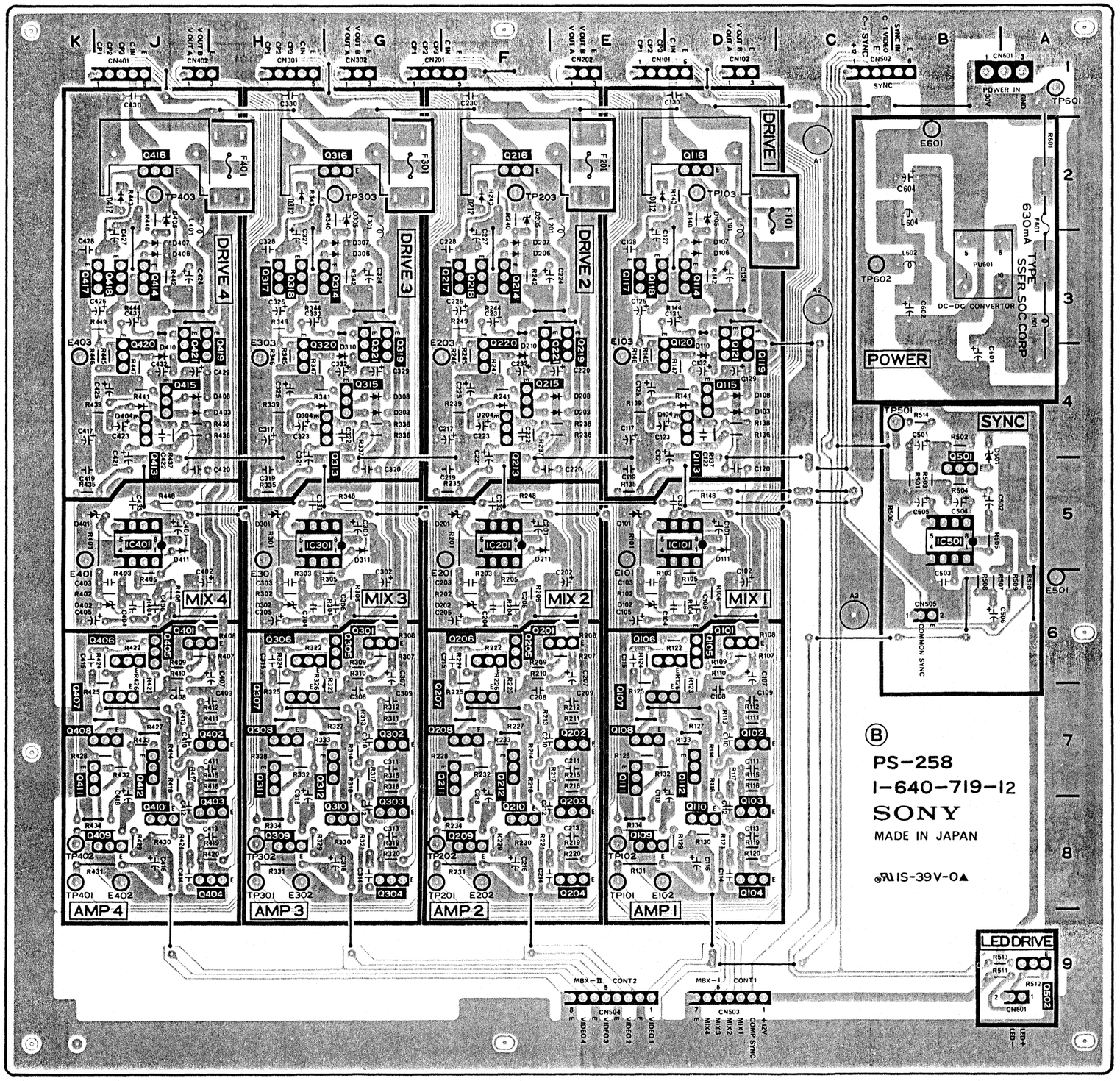
## FRAME WIRING

**PS-258 BOARD**
**LED-119 BOARD**
**CN-614 BOARD**
**F BOARD**

YS-W230 (J, UC)
YS-W230P (EK)

Serial No. (UC) 10001 through 10050
(EK) 10001 through 10160

– PS-258 Board – — *Conductor Side* —



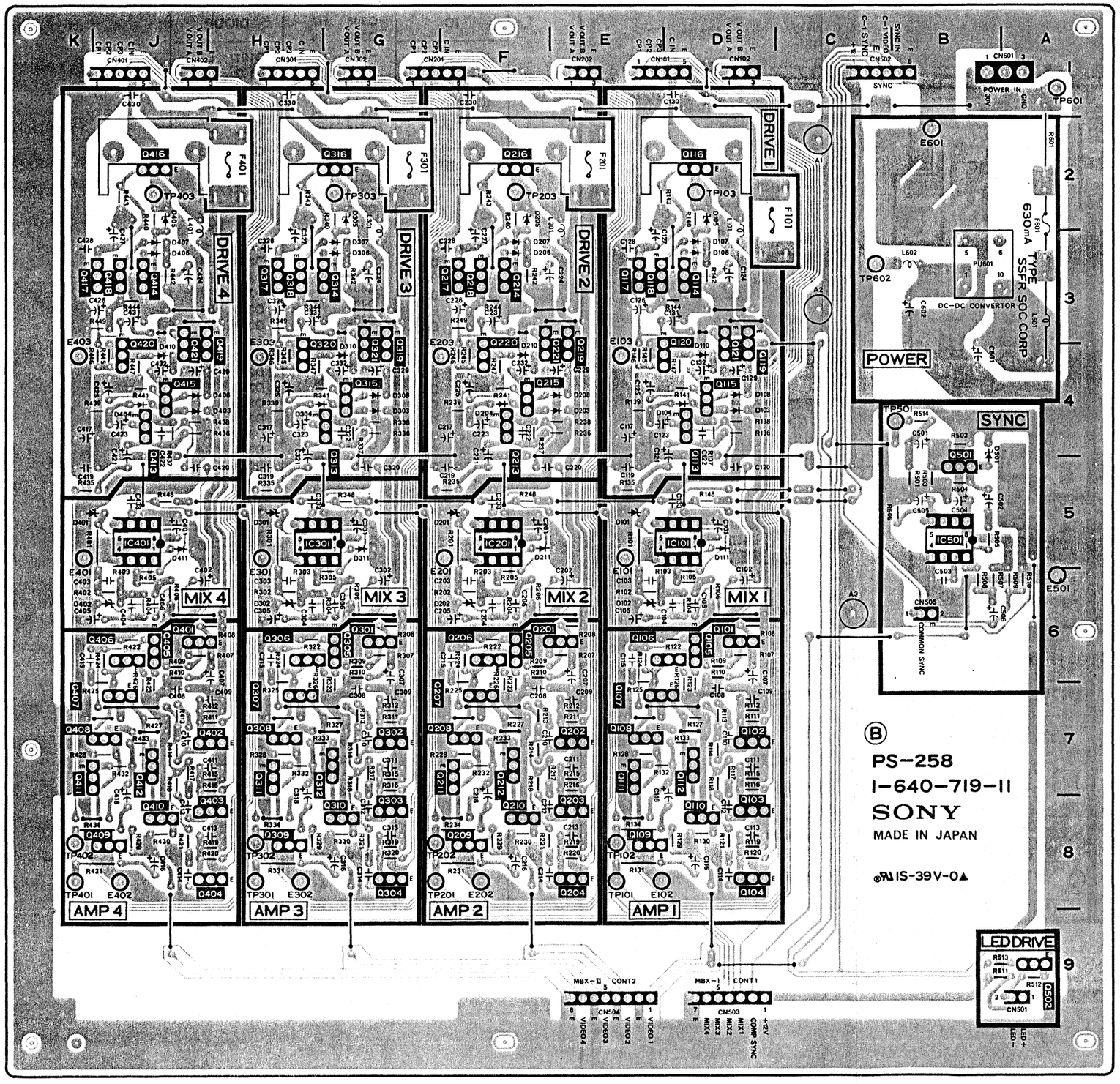

| IC | | Q308 | H7 | DIODE | |
|---|---|---|---|---|---|
| | | Q309 | H8 | | |
| IC101 | E6 | Q310 | G8 | D101 | E5 |
| IC201 | F6 | Q311 | H7 | D102 | E6 |
| IC301 | H6 | Q312 | H7 | D103 | D4 |
| IC401 | J6 | Q313 | G4 | D104 | D4 |
| IC501 | B5 | Q314 | G3 | D105 | D2 |
| | | Q315 | G4 | D106 | D3 |
| TRANSISTOR | | Q316 | G2 | D107 | D3 |
| | | Q317 | H3 | D108 | D4 |
| Q101 | D6 | Q318 | H3 | D110 | D4 |
| Q102 | D7 | Q319 | G3 | D111 | D5 |
| Q103 | D8 | Q320 | H3 | D112 | D2 |
| Q104 | D8 | Q321 | G3 | D201 | F5 |
| Q105 | D6 | Q401 | J6 | D202 | F6 |
| Q106 | D6 | Q402 | J7 | D203 | E4 |
| Q107 | D7 | Q403 | J8 | D204 | F4 |
| Q108 | E7 | Q404 | J8 | D205 | F2 |
| Q109 | E8 | Q405 | J6 | D206 | F3 |
| Q110 | D8 | Q406 | J6 | D207 | F3 |
| Q111 | E7 | Q407 | J7 | D208 | E4 |
| Q112 | D7 | Q408 | J7 | D210 | F4 |
| Q113 | D4 | Q409 | J8 | D211 | E5 |
| Q114 | D3 | Q410 | J8 | D212 | F2 |
| Q115 | D4 | Q411 | J7 | D301 | H5 |
| Q116 | D2 | Q412 | J7 | D302 | H6 |
| Q117 | E3 | Q413 | J4 | D303 | G4 |
| Q118 | E3 | Q414 | J3 | D304 | G4 |
| Q119 | D4 | Q415 | J4 | D305 | G2 |
| Q120 | D4 | Q416 | J2 | D306 | G3 |
| Q121 | D4 | Q417 | K3 | D307 | G3 |
| Q201 | E6 | Q418 | J3 | D308 | G4 |
| Q202 | E7 | Q419 | H3 | D310 | G4 |
| Q203 | E8 | Q420 | J4 | D311 | G5 |
| Q204 | E8 | Q421 | J3 | D312 | H2 |
| Q205 | F6 | Q501 | B5 | D401 | K5 |
| Q206 | F6 | Q502 | A9 | D402 | J6 |
| Q207 | F7 | | | D403 | J4 |
| Q208 | F7 | TP | | D404 | J4 |
| Q209 | F8 | | | D405 | J2 |
| Q210 | F8 | TP101 | E8 | D406 | J3 |
| Q211 | F7 | TP102 | E8 | D407 | J3 |
| Q212 | F7 | TP103 | D2 | D408 | J4 |
| Q213 | F4 | TP201 | F8 | D410 | J4 |
| Q214 | F3 | TP202 | F8 | D411 | J5 |
| Q215 | F4 | TP203 | F2 | D412 | J2 |
| Q216 | F2 | TP301 | H8 | D501 | B4 |
| Q217 | F3 | TP302 | H8 | | |
| Q218 | F3 | TP303 | G2 | OTHERS | |
| Q219 | E4 | TP401 | K8 | | |
| Q220 | F4 | TP402 | K8 | F601 | A2 |
| Q221 | E4 | TP403 | J2 | | |
| Q301 | G6 | TP501 | B4 | PU601 | B3 |
| Q302 | G7 | TP601 | A1 | | |
| Q303 | G8 | TP602 | C3 | | |
| Q304 | G8 | | | | |
| Q305 | G6 | | | | |
| Q306 | H6 | | | | |
| Q307 | H7 | | | | |

YS-W230/W230P YS-W230/W230P

Serial No. (UC) 10051 and higher
(EK) 10161 and higher

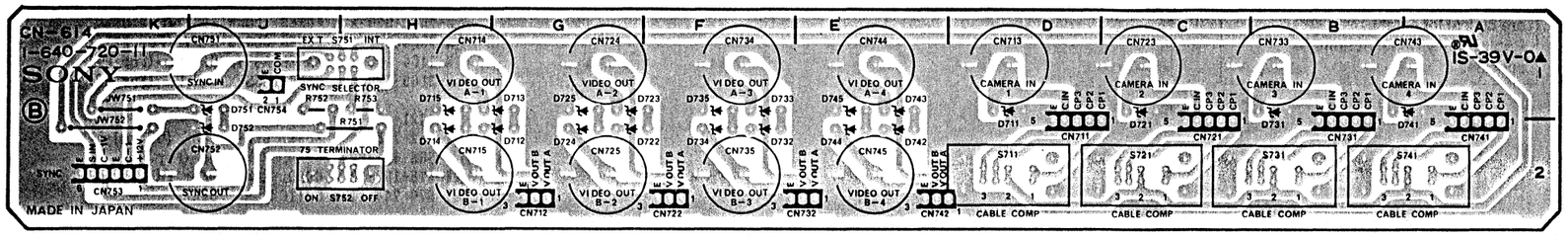
**PS-258** **PS-258**

– **PS-258 Board** – — *Conductor Side* —

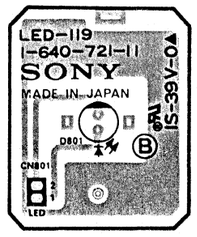



| IC | | Q308 | H7 | DIODE | |
|---|---|---|---|---|---|
| | | Q309 | H8 | | |
| IC101 | E6 | Q310 | G8 | D101 | E5 |
| IC201 | F6 | Q311 | H7 | D102 | E6 |
| IC301 | H6 | Q312 | H7 | D103 | D4 |
| IC401 | J6 | Q313 | G4 | D104 | D4 |
| IC501 | B5 | Q314 | G3 | D105 | D2 |
| | | Q315 | G4 | D106 | D3 |
| TRANSISTOR | | Q316 | G2 | D107 | D3 |
| | | Q317 | H3 | D108 | D4 |
| Q101 | D6 | Q318 | H3 | D110 | D4 |
| Q102 | D7 | Q319 | G3 | D111 | D5 |
| Q103 | D8 | Q320 | H3 | D112 | D3 |
| Q104 | D8 | Q321 | G3 | D201 | F5 |
| Q105 | D6 | Q401 | J6 | D202 | F6 |
| Q106 | D6 | Q402 | J7 | D203 | E4 |
| Q107 | D7 | Q403 | J8 | D204 | F4 |
| Q108 | E7 | Q404 | J8 | D205 | F2 |
| Q109 | E8 | Q405 | J6 | D206 | F3 |
| Q110 | D8 | Q406 | J6 | D207 | F3 |
| Q111 | E7 | Q407 | J7 | D208 | E4 |
| Q112 | D7 | Q408 | J7 | D210 | F4 |
| Q113 | D4 | Q409 | K8 | D211 | E5 |
| Q114 | D3 | Q410 | J8 | D212 | F3 |
| Q115 | D4 | Q411 | K7 | D301 | H5 |
| Q116 | D2 | Q412 | J7 | D302 | H6 |
| Q117 | E3 | Q413 | J7 | D303 | G4 |
| Q118 | E3 | Q414 | J3 | D304 | H4 |
| Q119 | D4 | Q415 | J4 | D305 | G2 |
| Q120 | D3 | Q416 | J2 | D306 | G3 |
| Q121 | D3 | Q417 | K3 | D307 | G2 |
| Q201 | F6 | Q418 | J3 | D308 | G4 |
| Q202 | F7 | Q419 | H3 | D310 | G4 |
| Q203 | E8 | Q420 | J4 | D311 | G5 |
| Q204 | E8 | Q421 | J3 | D312 | G3 |
| Q205 | F6 | Q501 | B5 | D401 | K5 |
| Q206 | F6 | Q502 | A9 | D402 | K6 |
| Q207 | F8 | | | D403 | H4 |
| Q208 | F7 | TP | | D404 | J4 |
| Q209 | F8 | | | D405 | J2 |
| Q210 | F8 | TP101 | E8 | D406 | J3 |
| Q211 | F7 | TP102 | E8 | D407 | J2 |
| Q212 | F7 | TP103 | D2 | D408 | H4 |
| Q213 | F5 | TP201 | F8 | D410 | J4 |
| Q214 | F3 | TP202 | F8 | D411 | J5 |
| Q215 | F4 | TP203 | F2 | D412 | J3 |
| Q216 | F2 | TP301 | H8 | D501 | B4 |
| Q217 | F3 | TP302 | H8 | | |
| Q218 | F3 | TP303 | G2 | OTHERS | |
| Q219 | E4 | TP401 | K8 | | |
| Q220 | F3 | TP402 | K8 | F601 | A2 |
| Q221 | E4 | TP403 | J2 | | |
| Q301 | G6 | TP501 | B4 | PU601 | B2 |
| Q302 | G7 | TP601 | A1 | | |
| Q303 | G8 | TP602 | C3 | | |
| Q304 | G8 | | | | |
| Q305 | G6 | | | | |
| Q306 | H6 | | | | |
| Q307 | H7 | | | | |

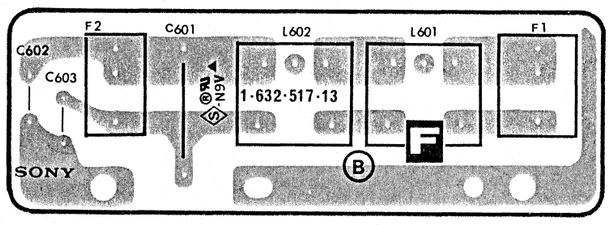
– CN-614 Board – — Conductor Side —




– LED-119 Board – — Conductor Side —



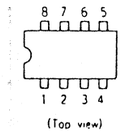

– F Board – — Conductor Side —
(YS-W230P only)



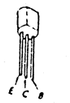



## 4-4. SEMICONDUCTORS

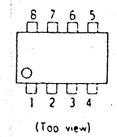
**LM1881N**



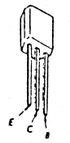

**2SA933S-R**



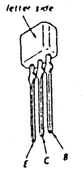

**MC14577AP**



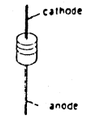

**2SC1740S-R**
**DTC114ES**



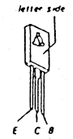

**2SA1175-HFE**
**2SC2785-HFE**



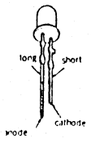

**1SS119**
**RD3.6ES-B2**
**RD5.6ES-B2**
**RD8.2ES-B**
**RD33ES-B2**




**2SA1220A-P**
**2SA1220A-Q**




**SLR-34MG3F**



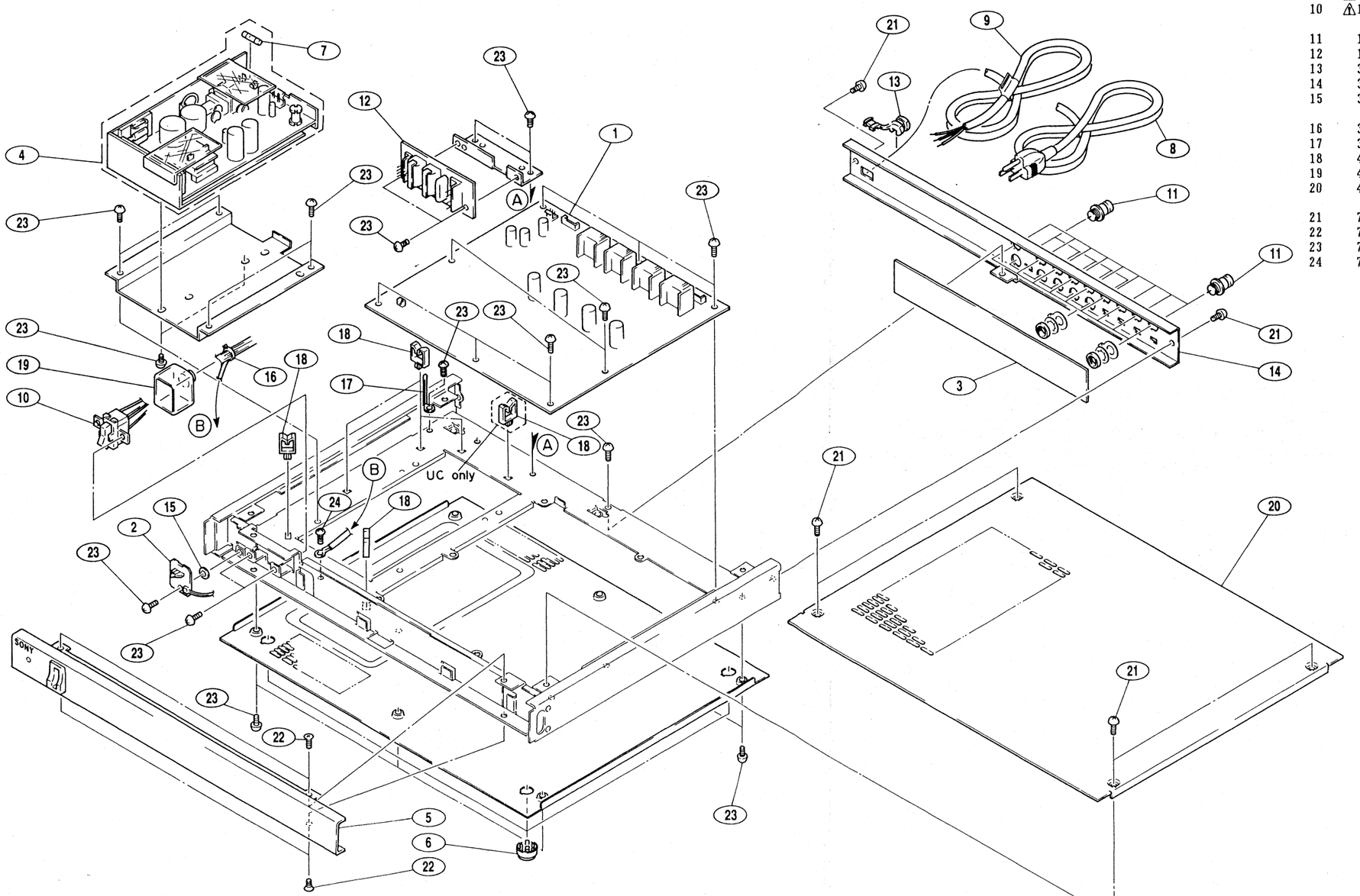
# SECTION 5
# REPAIR PARTS

**[NOTE]**

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- All resistors are in ohms.
- US: YS-W230
- EK: YS-W230P
- items marked "o" in the SP column are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by mark ⚠ are critical for safety.
Replace only with part number specified.

## 5-1. EXPLODED VIEWS






| No. | Part No. | SP | Description |
|---|---|---|---|
| 1 | A-7515-384-A | o | MOUNTED CIRCUIT BOARD, PS-258 |
| 2 | A-7520-571-A | o | MOUNTED CIRCUIT BOARD, LED-119 |
| 3 | A-7520-572-A | o | MOUNTED CIRCUIT BOARD, CN-614 |
| 4 | ⚠A-7580-030-A | s | POWER BLOCK ASSY (For UC) |
| | ⚠A-7580-031-A | s | POWER BLOCK ASSY (For EK) |
| 5 | X-3166-195-1 | o | PANEL ASSY, C.C.U. (For EK) |
| | X-3166-196-1 | o | PANEL ASSY, C.C.U. (For UC) |
| 6 | X-4921-901-1 | s | FOOT ASSY |
| 7 | ⚠1-532-745-11 | s | FUSE, GLASS TUBE (UC only) |
| 8 | ⚠1-556-415-00 | s | CORD, POWER 3P (For UC) |
| 9 | ⚠1-575-192-12 | s | CORD, POWER (For EK) |
| 10 | ⚠1-570-744-11 | s | SWITCH, AC POWER |
| 11 | 1-580-724-21 | s | CONNECTOR, BNC |
| 12 | 1-632-517-11 | o | PRINTED CIRCUIT BOARD, F (EK only) |
| 13 | 3-005-073-00 | s | BUSHING |
| 14 | 3-172-248-01 | o | PANEL, C.C.U. REAR |
| 15 | 3-350-679-11 | s | WASHER, FIBER |
| 16 | 3-701-748-00 | s | CLAMP |
| 17 | 3-703-150-11 | s | STOPPER, WIRING (EK only) |
| 18 | 4-309-753-00 | o | HOLDER, WIRE |
| 19 | 4-381-806-01 | o | COVER, SWITCH |
| 20 | 4-391-042-01 | o | LID, UPPER |
| 21 | 7-682-547-09 | s | SCREW +BV 3X6 |
| 22 | 7-685-246-19 | s | SCREW +KTP 3X8 TYPE2 NON-SLIT |
| 23 | 7-685-871-01 | s | SCREW +BVTT 3X6 (S) |
| 24 | 7-682-560-04 | s | SCREW +BVTT 4X6 (S) |

## 5-2. ELECTRICAL PARTS LIST

CN-614 BOARD

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| 1pc | A-7520-572-A | o | MOUNTED CIRCUIT BOARD, CN-614 |
| 1pc | 1-562-505-11 | s | CONNECTOR, MICRO (HOUSING) 3P |
| 1pc | 1-562-505-21 | o | CONNECTOR, MICRO (HOUSING) 3P |
| CN711 | 1-948-927-11 | o | HARNESS 5P |
| CN712 | 1-948-923-11 | o | HARNESS 3P |
| CN721 | 1-948-928-11 | o | HARNESS 5P |
| CN722 | 1-948-924-11 | o | HARNESS 3P |
| CN731 | 1-948-929-11 | o | HARNESS 5P |
| CN732 | 1-948-925-11 | o | HARNESS 3P |
| CN741 | 1-948-930-11 | o | HARNESS 5P |
| CN742 | 1-948-926-11 | o | HARNESS 3P |
| CN753 | 1-948-931-11 | o | HARNESS 6P |
| CN754 | 1-948-933-11 | o | HARNESS 2P |
| D711 | 8-719-110-78 | s | DIODE RD33ES-B2 |
| D712 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D713 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D714 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D715 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D721 | 8-719-110-78 | s | DIODE RD33ES-B2 |
| D722 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D723 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D724 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D725 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D731 | 8-719-110-78 | s | DIODE RD33ES-B2 |
| D732 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D733 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D734 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D735 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D741 | 8-719-110-78 | s | DIODE RD33ES-B2 |
| D742 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D743 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D744 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D745 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D751 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D752 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| R751 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R752 | 1-249-440-11 | s | CARBON 82K 5% 1/4W |
| R753 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| S711 | 1-570-056-11 | s | SWITCH, SLIDE |
| S721 | 1-570-056-11 | s | SWITCH, SLIDE |
| S731 | 1-570-056-11 | s | SWITCH, SLIDE |
| S741 | 1-570-056-11 | s | SWITCH, SLIDE |
| S751 | 1-571-738-11 | s | SWITCH, SLIDE |
| S752 | 1-571-738-11 | s | SWITCH, SLIDE |

F BOARD (YS-W230P only)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| 1pc | 1-632-517-11 | o | PRINTED CIRCUIT BOARD, F |
| C601 | ⚠1-130-711-00 | s | FILM 0.22uF 20% 250V |
| C602 | ⚠1-161-741-00 | s | CERAMIC 1000PF 20% AC400V |
| C603 | ⚠1-161-741-00 | s | CERAMIC 1000PF 20% AC400V |
| F1 | 1-564-917-11 | o | PIN, CONNECTOR 3P |
| F2 | 1-564-917-11 | o | PIN, CONNECTOR 3P |
| L601 | ⚠1-421-760-11 | s | LFT |
| L602 | ⚠1-421-760-11 | s | LFT |

LED-119 BOARD

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| 1pc | A-7520-571-A | o | MOUNTED CIRCUIT BOARD, LED-119 |
| 1pc | 4-348-208-00 | o | HOLDER, LED |
| CN801 | 1-948-922-11 | o | HARNESS 2P |
| D801 | 8-719-980-40 | s | DIODE SLR-34MG3F |

PS-258 BOARD

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| 1pc | A-7515-384-A | o | MOUNTED CIRCUIT BOARD, PS-258 |
| 2pcs | 1-533-146-00 | o | HOLDER, FUSE |
| 1pc | 3-334-236-01 | s | INSULATOR, TO-220 |
| 1pc | 4-363-146-00 | o | HEAT SINK, V.OUT |
| 1pc | 7-685-871-01 | s | SCREW +BVTT 3X6 (S) |
| C101 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C102 | 1-126-105-11 | s | ELECT 1000uF 20% 35V |
| C103 | 1-102-973-00 | s | CERAMIC 100PF 5% 50V |
| C104 | 1-102-942-00 | s | CERAMIC 5PF 0.5PF 50V |
| C105 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C106 | 1-136-161-00 | s | FILM 0.047uF 5% 50V |
| C107 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C108 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C109 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C110 | 1-102-822-00 | s | CERAMIC 390PF 5% 50V |
| C111 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C112 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C113 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C114 | 1-102-959-00 | s | CERAMIC 22PF 5% 50V |
| C115 | 1-102-961-00 | s | CERAMIC 27PF 5% 50V |
| C116 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C117 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C118 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C119 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C120 | 1-102-978-00 | s | CERAMIC 220PF 5% 50V |
| C121 | 1-124-791-11 | s | ELECT 1uF 20% 50V |
| C122 | 1-102-119-00 | s | CERAMIC 0.0015uF 10% 50V |
| C123 | 1-124-252-00 | s | ELECT 0.33uF 20% 50V |
| C124 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C125 | 1-124-478-11 | s | ELECT 100uF 20% 25V |
| C126 | 1-124-907-11 | s | ELECT 10uF 20% 50V |
| C127 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C128 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C129 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C130 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C131 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C132 | 1-124-482-11 | s | ELECT 33uF 20% 35V |
| C133 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C201 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C202 | 1-126-105-11 | s | ELECT 1000uF 20% 35V |
| C203 | 1-102-973-00 | s | CERAMIC 100PF 5% 50V |
| C204 | 1-102-942-00 | s | CERAMIC 5PF 0.5PF 50V |
| C205 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C206 | 1-136-161-00 | s | FILM 0.047uF 5% 50V |
| C207 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C208 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C209 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C210 | 1-102-822-00 | s | CERAMIC 390PF 5% 50V |
| C211 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C212 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C213 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C214 | 1-102-959-00 | s | CERAMIC 22PF 5% 50V |
| C215 | 1-102-961-00 | s | CERAMIC 27PF 5% 50V |
| C216 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C217 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C218 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C219 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C220 | 1-102-978-00 | s | CERAMIC 220PF 5% 50V |
| C221 | 1-124-791-11 | s | ELECT 1uF 20% 50V |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| C222 | 1-102-119-00 | s | CERAMIC 0.0015uF 10% 50V |
| C223 | 1-124-252-00 | s | ELECT 0.33uF 20% 50V |
| C224 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C225 | 1-124-478-11 | s | ELECT 100uF 20% 25V |
| C226 | 1-124-907-11 | s | ELECT 10uF 20% 50V |
| C227 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C228 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C229 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C230 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C231 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C232 | 1-124-482-11 | s | ELECT 33uF 20% 35V |
| C233 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C301 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C302 | 1-126-105-11 | s | ELECT 1000uF 20% 35V |
| C303 | 1-102-973-00 | s | CERAMIC 100PF 5% 50V |
| C304 | 1-102-942-00 | s | CERAMIC 5PF 0.5PF 50V |
| C305 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C306 | 1-136-161-00 | s | FILM 0.047uF 5% 50V |
| C307 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C308 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C309 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C310 | 1-102-822-00 | s | CERAMIC 390PF 5% 50V |
| C311 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C312 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C313 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C314 | 1-102-959-00 | s | CERAMIC 22PF 5% 50V |
| C315 | 1-102-961-00 | s | CERAMIC 27PF 5% 50V |
| C316 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C317 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C318 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C319 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C320 | 1-102-978-00 | s | CERAMIC 220PF 5% 50V |
| C321 | 1-124-791-11 | s | ELECT 1uF 20% 50V |
| C322 | 1-102-119-00 | s | CERAMIC 0.0015uF 10% 50V |
| C323 | 1-124-252-00 | s | ELECT 0.33uF 20% 50V |
| C324 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C325 | 1-124-478-11 | s | ELECT 100uF 20% 25V |
| C326 | 1-124-907-11 | s | ELECT 10uF 20% 50V |
| C327 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C328 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C329 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C330 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C331 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C332 | 1-124-482-11 | s | ELECT 33uF 20% 35V |
| C333 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C401 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C402 | 1-126-105-11 | s | ELECT 1000uF 20% 35V |
| C403 | 1-102-973-00 | s | CERAMIC 100PF 5% 50V |
| C404 | 1-102-942-00 | s | CERAMIC 5PF 0.5PF 50V |
| C405 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C406 | 1-136-161-00 | s | FILM 0.047uF 5% 50V |
| C407 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C408 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C409 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C410 | 1-102-822-00 | s | CERAMIC 390PF 5% 50V |
| C411 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C412 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C413 | 1-161-061-11 | s | CERAMIC 0.068uF 10% 50V |
| C414 | 1-102-959-00 | s | CERAMIC 22PF 5% 50V |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| C415 | 1-102-961-00 | s | CERAMIC 27PF 5% 50V |
| C416 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C417 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C418 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C419 | 1-101-004-00 | s | CERAMIC 0.01uF 50V |
| C420 | 1-102-978-00 | s | CERAMIC 220PF 5% 50V |
| C421 | 1-124-791-11 | s | ELECT 1uF 20% 50V |
| C422 | 1-102-119-00 | s | CERAMIC 0.0015uF 10% 50V |
| C423 | 1-124-252-00 | s | ELECT 0.33uF 20% 50V |
| C424 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C425 | 1-124-478-11 | s | ELECT 100uF 20% 25V |
| C426 | 1-124-907-11 | s | ELECT 10uF 20% 50V |
| C427 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C428 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C429 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C430 | 1-101-006-00 | s | CERAMIC 0.047uF 50V |
| C431 | 1-126-233-11 | s | ELECT 22uF 20% 50V |
| C432 | 1-124-482-11 | s | ELECT 33uF 20% 35V |
| C433 | 1-101-361-00 | s | CERAMIC 150PF 5% 50V |
| C501 | 1-126-096-11 | s | ELECT 10uF 20% 35V |
| C502 | 1-124-464-11 | s | ELECT 0.22MF 20% 50V |
| C503 | 1-102-074-00 | s | CERAMIC 0.001uF 10% 50V |
| C504 | 1-124-477-11 | s | ELECT 47uF 20% 25V |
| C505 | 1-124-463-00 | s | ELECT 0.1uF 20% 50V |
| C506 | 1-126-096-11 | s | ELECT 10uF 20% 35V |
| C601 | 1-124-913-11 | s | ELECT 470uF 20% 50V |
| C602 | 1-126-103-11 | s | ELECT 470uF 20% 16V |
| C604 | 1-124-791-11 | s | ELECT 1uF 20% 50V |
| CN101 | 1-564-508-11 | o | PLUG, CONNECTOR 5P |
| CN102 | 1-564-506-11 | o | PLUG, CONNECTOR 3P |
| CN201 | 1-564-508-11 | o | PLUG, CONNECTOR 5P |
| CN202 | 1-564-506-11 | o | PLUG, CONNECTOR 3P |
| CN301 | 1-564-508-11 | o | PLUG, CONNECTOR 5P |
| CN302 | 1-564-506-11 | o | PLUG, CONNECTOR 3P |
| CN401 | 1-564-508-11 | o | PLUG, CONNECTOR 5P |
| CN402 | 1-564-506-11 | o | PLUG, CONNECTOR 3P |
| CN501 | 1-564-505-11 | o | PLUG, CONNECTOR 2P |
| CN502 | 1-564-509-11 | o | PLUG, CONNECTOR 6P |
| CN505 | 1-564-505-11 | o | PLUG, CONNECTOR 2P |
| CN601 | 1-564-104-00 | o | PIN, CONNECTOR (B3P-VH) 3P |
| D101 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D102 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D103 | 8-719-911-19 | s | DIODE 1SS119 |
| D104 | 8-719-911-19 | s | DIODE 1SS119 |
| D105 | 8-719-109-69 | s | DIODE RD3.6ES-B2 |
| D106 | 8-719-911-19 | s | DIODE 1SS119 |
| D107 | 8-719-911-19 | s | DIODE 1SS119 |
| D108 | 8-719-911-19 | s | DIODE 1SS119 |
| D110 | 8-719-911-19 | s | DIODE 1SS119 |
| D111 | 8-719-911-19 | s | DIODE 1SS119 |
| D112 | 8-719-911-19 | s | DIODE 1SS119 |
| D201 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D202 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D203 | 8-719-911-19 | s | DIODE 1SS119 |
| D204 | 8-719-911-19 | s | DIODE 1SS119 |
| D205 | 8-719-109-69 | s | DIODE RD3.6ES-B2 |
| D206 | 8-719-911-19 | s | DIODE 1SS119 |
| D207 | 8-719-911-19 | s | DIODE 1SS119 |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| D208 | 8-719-911-19 | s | DIODE 1SS119 |
| D210 | 8-719-911-19 | s | DIODE 1SS119 |
| D211 | 8-719-911-19 | s | DIODE 1SS119 |
| D212 | 8-719-911-19 | s | DIODE 1SS119 |
| D301 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D302 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D303 | 8-719-911-19 | s | DIODE 1SS119 |
| D304 | 8-719-911-19 | s | DIODE 1SS119 |
| D305 | 8-719-109-69 | s | DIODE RD3.6ES-B2 |
| D306 | 8-719-911-19 | s | DIODE 1SS119 |
| D307 | 8-719-911-19 | s | DIODE 1SS119 |
| D308 | 8-719-911-19 | s | DIODE 1SS119 |
| D310 | 8-719-911-19 | s | DIODE 1SS119 |
| D311 | 8-719-911-19 | s | DIODE 1SS119 |
| D312 | 8-719-911-19 | s | DIODE 1SS119 |
| D401 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D402 | 8-719-110-09 | s | DIODE RD8.2ES-B3 |
| D403 | 8-719-911-19 | s | DIODE 1SS119 |
| D404 | 8-719-911-19 | s | DIODE 1SS119 |
| D405 | 8-719-109-69 | s | DIODE RD3.6ES-B2 |
| D406 | 8-719-911-19 | s | DIODE 1SS119 |
| D407 | 8-719-911-19 | s | DIODE 1SS119 |
| D408 | 8-719-911-19 | s | DIODE 1SS119 |
| D410 | 8-719-911-19 | s | DIODE 1SS119 |
| D411 | 8-719-911-19 | s | DIODE 1SS119 |
| D412 | 8-719-911-19 | s | DIODE 1SS119 |
| D501 | 8-719-109-89 | s | DIODE RD5.6ES-B2 |
| F101 | ⚠1-532-737-11 | s | FUSE, GLASS TUBE |
| F201 | ⚠1-532-737-11 | s | FUSE, GLASS TUBE |
| F301 | ⚠1-532-737-11 | s | FUSE, GLASS TUBE |
| F401 | ⚠1-532-737-11 | s | FUSE, GLASS TUBE |
| F601 | ⚠1-532-774-11 | s | FUSE, MICRO (SECONDARY) |
| IC101 | 8-759-037-18 | s | IC MC14577AP |
| IC201 | 8-759-037-18 | s | IC MC14577AP |
| IC301 | 8-759-037-18 | s | IC MC14577AP |
| IC401 | 8-759-037-18 | s | IC MC14577AP |
| IC501 | 8-759-972-26 | s | IC LM1881N |
| L101 | 1-459-313-00 | s | COIL WITH CORE (HWC) |
| L201 | 1-459-313-00 | s | COIL WITH CORE (HWC) |
| L301 | 1-459-313-00 | s | COIL WITH CORE (HWC) |
| L401 | 1-459-313-00 | s | COIL WITH CORE (HWC) |
| L601 | 1-407-556-00 | s | CHOKE COIL |
| L602 | 1-410-663-31 | s | INDUCTOR 10UH |
| L604 | 1-410-663-31 | s | INDUCTOR 10UH |
| PU601 | ⚠1-466-012-11 | s | CONVERTER UNIT, DC-DC |
| Q101 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q102 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q103 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q104 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q105 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q106 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q107 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q108 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q109 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q110 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q111 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q112 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| Q113 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q114 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q115 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q116 | 8-729-122-03 | s | TRANSISTOR 2SA1220A-P |
| Q117 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q118 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q119 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q120 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q121 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q201 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q202 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q203 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q204 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q205 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q206 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q207 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q208 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q209 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q210 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q211 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q212 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q213 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q214 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q215 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q216 | 8-729-122-03 | s | TRANSISTOR 2SA1220A-P |
| Q217 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q218 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q219 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q220 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q221 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q301 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q302 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q303 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q304 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q305 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q306 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q307 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q308 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q309 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q310 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q311 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q312 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q313 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q314 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q315 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q316 | 8-729-122-03 | s | TRANSISTOR 2SA1220A-P |
| Q317 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q318 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q319 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q320 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q321 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q401 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q402 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q403 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q404 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q405 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q406 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q407 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q408 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| Q409 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q410 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q411 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q412 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q413 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q414 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q415 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q416 | 8-729-122-03 | s | TRANSISTOR 2SA1220A-P |
| Q417 | 8-729-119-76 | s | TRANSISTOR 2SA1175-HFE |
| Q418 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q419 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q420 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q421 | 8-729-900-80 | s | TRANSISTOR DTC114ES |
| Q501 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| Q502 | 8-729-119-78 | s | TRANSISTOR 2SC2785-HFE |
| R101 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R102 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R103 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R104 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R105 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R106 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R107 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R108 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R109 | 1-249-398-11 | s | CARBON 27 5% 1/4W |
| R110 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R111 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R112 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R113 | 1-249-406-11 | s | CARBON 120 5% 1/4W |
| R114 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R115 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R116 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R117 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R118 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R119 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R120 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R121 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R122 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R123 | 1-249-415-11 | s | CARBON 680 5% 1/4W |
| R124 | 1-249-413-11 | s | CARBON 470 5% 1/4W |
| R125 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R126 | 1-249-397-11 | s | CARBON 22 5% 1/4W |
| R127 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R128 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R129 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R130 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R131 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R132 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R133 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R134 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R135 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R136 | 1-247-889-00 | s | CARBON 270K 5% 1/4W |
| R137 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R138 | 1-249-434-11 | s | CARBON 27K 5% 1/4W |
| R139 | 1-249-423-11 | s | CARBON 3.3K 5% 1/4W |
| R140 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R141 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R142 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R143 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R144 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| R145 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R146 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R147 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R148 | 1-249-405-11 | s | CARBON 100 5% 1/4W |
| R201 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R202 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R203 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R204 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R205 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R206 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R207 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R208 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R209 | 1-249-398-11 | s | CARBON 27 5% 1/4W |
| R210 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R211 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R212 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R213 | 1-249-406-11 | s | CARBON 120 5% 1/4W |
| R214 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R215 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R216 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R217 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R218 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R219 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R220 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R221 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R222 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R223 | 1-249-415-11 | s | CARBON 680 5% 1/4W |
| R224 | 1-249-413-11 | s | CARBON 470 5% 1/4W |
| R225 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R226 | 1-249-397-11 | s | CARBON 22 5% 1/4W |
| R227 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R228 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R229 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R230 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R231 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R232 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R233 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R234 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R235 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R236 | 1-247-889-00 | s | CARBON 270K 5% 1/4W |
| R237 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R238 | 1-249-434-11 | s | CARBON 27K 5% 1/4W |
| R239 | 1-249-423-11 | s | CARBON 3.3K 5% 1/4W |
| R240 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R241 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R242 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R243 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R244 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R245 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R246 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R247 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R248 | 1-249-405-11 | s | CARBON 100 5% 1/4W |
| R249 | 1-249-437-11 | s | CARBON 47K 5% 1/4W |
| R301 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R302 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R303 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R304 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R305 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R306 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| R307 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R308 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R309 | 1-249-398-11 | s | CARBON 27 5% 1/4W |
| R310 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R311 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R312 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R313 | 1-249-406-11 | s | CARBON 120 5% 1/4W |
| R314 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R315 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R316 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R317 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R318 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R319 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R320 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R321 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R322 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R323 | 1-249-415-11 | s | CARBON 680 5% 1/4W |
| R324 | 1-249-413-11 | s | CARBON 470 5% 1/4W |
| R325 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R326 | 1-249-397-11 | s | CARBON 22 5% 1/4W |
| R327 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R328 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R329 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R330 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R331 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R332 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R333 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R334 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R335 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R336 | 1-247-889-00 | s | CARBON 270K 5% 1/4W |
| R337 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R338 | 1-249-434-11 | s | CARBON 27K 5% 1/4W |
| R339 | 1-249-423-11 | s | CARBON 3.3K 5% 1/4W |
| R340 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R341 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R342 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R343 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R344 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R345 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R346 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R347 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R348 | 1-249-405-11 | s | CARBON 100 5% 1/4W |
| R349 | 1-249-437-11 | s | CARBON 47K 5% 1/4W |
| R401 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R402 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R403 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R404 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R405 | 1-249-442-11 | s | CARBON 510 5% 1/4W |
| R406 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R407 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R408 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R409 | 1-249-398-11 | s | CARBON 27 5% 1/4W |
| R410 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R411 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R412 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R413 | 1-249-406-11 | s | CARBON 120 5% 1/4W |
| R414 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R415 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R416 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |

(PS-258 BOARD)

| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| R417 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R418 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R419 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R420 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R421 | 1-249-417-11 | s | CARBON 1K 5% 1/4W |
| R422 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R423 | 1-249-415-11 | s | CARBON 680 5% 1/4W |
| R424 | 1-249-413-11 | s | CARBON 470 5% 1/4W |
| R425 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R426 | 1-249-397-11 | s | CARBON 22 5% 1/4W |
| R427 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R428 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R429 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R430 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R431 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R432 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R433 | 1-249-385-11 | s | CARBON 2.2 5% 1/4W |
| R434 | 1-260-158-91 | s | CARBON 75 5% 1/2W |
| R435 | 1-249-411-11 | s | CARBON 330 5% 1/4W |
| R436 | 1-247-889-00 | s | CARBON 270K 5% 1/4W |
| R437 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R438 | 1-249-434-11 | s | CARBON 27K 5% 1/4W |
| R439 | 1-249-423-11 | s | CARBON 3.3K 5% 1/4W |
| R440 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R441 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R442 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R443 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R444 | 1-249-426-11 | s | CARBON 5.6K 5% 1/4W |
| R445 | 1-249-421-11 | s | CARBON 2.2K 5% 1/4W |
| R446 | 1-249-433-11 | s | CARBON 22K 5% 1/4W |
| R447 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R448 | 1-249-405-11 | s | CARBON 100 5% 1/4W |
| R449 | 1-249-437-11 | s | CARBON 47K 5% 1/4W |
| R501 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R502 | 1-249-429-11 | s | CARBON 10K 5% 1/4W |
| R503 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R504 | 1-249-416-11 | s | CARBON 820 5% 1/4W |
| R505 | 1-249-406-11 | s | CARBON 120 5% 1/4W |
| R506 | 1-247-899-11 | s | CARBON 680K 5% 1/4W |
| R507 | 1-249-406-11 | s | CARBON 120 5% 1/4W |
| R508 | 1-249-419-11 | s | CARBON 1.5K 5% 1/4W |
| R509 | 1-249-440-11 | s | CARBON 82K 5% 1/4W |
| R510 | 1-249-435-11 | s | CARBON 33K 5% 1/4W |
| R511 | 1-249-415-11 | s | CARBON 680 5% 1/4W |
| R512 | 1-249-422-11 | s | CARBON 2.7K 5% 1/4W |
| R513 | 1-249-437-11 | s | CARBON 47K 5% 1/4W |
| R514 | 1-249-405-11 | s | CARBON 100 5% 1/4W |
| R601 | 1-215-880-00 | s | METAL 10 5% 2W |

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FRAME
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| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| 1pc | ⚠A-7580-030-A | s | POWER BLOCK ASSY (For UC) |
| 1pc | ⚠A-7580-031-A | s | POWER BLOCK ASSY (For EK) |
| 1pc | ⚠1-556-415-00 | s | CORD, POWER 3P (For UC) |
| 1pc | ⚠1-575-192-12 | s | CORD, POWER (For EK) |
| 14pcs | 1-580-724-21 | s | CONNECTOR, BNC |
| S901 | ⚠1-570-744-11 | s | SWITCH, AC POWER |

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PACKING MATERIALS & SUPPLIED ACCESSORIES
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| Ref. No. or Q'ty | Part No. | SP | Description |
|---|---|---|---|
| 1pc | 3-172-765-01 | o | INDIVIDUAL CARTON (For UC) |
| 1pc | 3-172-766-01 | o | INDIVIDUAL CARTON (For EK) |
| 1pc | 3-701-630-00 | s | BAG, POLYETHYLENE |
| 1pc | 3-753-929-21 | s | MANUAL, INSTRUCTION (For UC) |
| 1pc | 3-753-929-41 | s | MANUAL, INSTRUCTION (For EK) |
| 1pc | 3-795-581-21 | s | SAFEGUARD (SONY), IMPORTANT (UC only) |
| 1pc | 4-026-824-01 | o | BAG, PROTECTION |
| 2pcs | 4-391-010-01 | s | BRACKET (1U), RACK MOUNT |
| 1pc | 4-391-032-01 | o | CUSHION (FRONT) |
| 1pc | 4-391-033-01 | o | CUSHION (REAR) |
| 4pcs | 7-682-660-09 | s | SCREW +PS 4X6 |